

ABSTRACT

A process of forming a functional thin film uniformly on the surface of a large size glass substrate, which is used for construction or the like, and a glass substrate coated with a thin film formed by the above process are provided. A uniform metal oxide thin film is formed by: using large size plate glass produced by the float bath process, in which molten glass is poured into an Sn bath and gradually hardened; and applying by spraying a coating solution containing an alcohol as a solvent and 5% by mass to 15% by mass of water onto the bottom surface of the large size plate glass, which is formed by bringing the molten glass into contact with the Sn bath, while controlling the wettability of the coating solution on the glass substrate.